

Application S.N. 10/630,065

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Reply to Office Action Dated June 17, 2005

REMARKS

After entry of this amendment, claims 1-3, 5-25, 27-46 are pending the application. Claims 45 and 46 have been added in this amendment. Claims 1-3, 5-14, 23-25, 27-34, and 43-44 have been indicated as being allowable over the prior art of record. Claim 44 has been amended to depend from claim 23. Reconsideration of the application as amended is requested.

In the Office Action dated June 17, 2005, claim 44 was objected to as depending from apparatus claim 21. Claim 44 has been amended to depend from allowable method claim 23. Reconsideration of the Examiner's objection to claims 44 is requested.

Claims 15-22, and 35-42 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hoffman et al. (US Patent No. 6,236,190). The Examiner asserts that Hoffman discloses a device and method for driving a capacitive actuator; the device comprising a piezo-electric (smart material) actuator(P); a power source(B) connected to the actuator and a switch circuit for discharging the actuator in response to the removal of the power source (see Figures 1-2 and it's description). The Examiner further states that the term "actively" is a relative term that has been given little patentable weight. It is submitted that the Hoffman et al. reference does not anticipate, teach, or suggest the invention as recited in the claims of the present application. In particular, Hoffman fails to teach "a switch circuit for actively discharging the smart material actuator in response to removal of the connection of the power source". The Hoffman et al. reference achieves discharge by a positive signal applied to T2 by control circuit ST in response to the absence of signal st ($st=0$, see column 4, lines 44-48, and steps V and VI of Figure 3). Nowhere in the specification or drawings of the Hoffman et al. reference is removal of the power source taught or suggested, since discharge as disclosed in Hoffman et al. is instead achieved within the context of control circuit ST functioning at all times with the power source. Further, the Hoffman et al. reference fails to enable a switch circuit for actively discharging a smart material actuator and the response to removal of connection to the power source and therefore cannot form the basis of a prima facie anticipation rejection. There is no teaching in Hoffman et al. of how removal of the connection to the power source causes discharging of the smart material actuator.

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Indeed, there is no teaching at all of removal of connection to the power source.

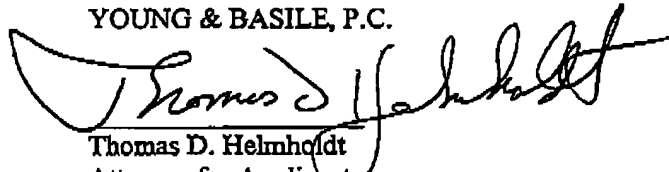
Reconsideration of the Examiner's rejection is requested.

It is respectfully submitted that this Amendment traverses and overcomes all of the Examiner's objections and rejections to the application as originally filed. It is further submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,

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Dated: September 19, 2005
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